



EL MONTE UNION HIGH SCHOOL DISTRICT
3537 JOHNSON AVENUE
EL MONTE, CA 91731
SUPPLEMENTAL SCOPE
BID No. 2017-18 (B4)
**INSTALLATION OF DISTRICT-OWNED
SURVEILLANCE CAMERAS AND
WIRELESS ACCESS POINTS DISTRICTWIDE**

1.01 SECTION INCLUDES

- 1.02 Work covered by Contract Documents
- 1.03 Scope of Work
- 1.04 Technical Specifications
- 1.05 Locations and Quantities
- 1.06 Camera Allocation
- 1.07 Additional Work
- 1.08 Contractors use of premises
- 1.09 Additional Contractor Duties

1.02 WORK COVERED BY CONTRACT DOCUMENTS

- A.** Work Included: The work to be performed by the Contractor shall conform to all the Contract Documents such as, but not limited to, the requirements the General Conditions, Instruction to Bidders, all sheets contained within the Contract Documents and other related documents and shall include the furnishing of all layout, supervision, labor, services, materials, installation, cartage, hoisting, supplies, insurance, equipment, scaffolding, tools, and other facilities of every kind and description required for the prompt and efficient execution of the work described herein and to perform the work necessary or incidental to complete the Project, including installation of all items furnished within this Package, in strict accordance with the Contract Documents.
- B.** The El Monte Union High School District ("District") will provide all surveillance cameras and wireless access points to the awarded Contractor at the start of work for each site. While a certification for installing the equipment provided by the District, the Contractor is expected to have the requisite knowledge and experience to install the equipment as specified in Section 1.04 Technical Specifications below.

NOTE: Appendices available for download at <https://www.emuhd.org/bids>.

1.03 Scope of Work

Installation of approximately two hundred (200) Video Insight cameras and approximately eighty (80) Aruba external, wireless access points; pulling/ connecting up to four hundred (400) new drops to IDF patch panels at locations throughout the District as specified. Project completion is estimated at seventy (70) days

1. Install Category 6 network cables from existing building IDFs (predominantly Rittal external enclosures) to designated external camera/access point locations; see Section 1.06 for all network drop locations. Pull 2 cables per designated location and terminate at either end. The IDF end will feed into an existing network patch panel and the other end will be fed into a 4 square junction box externally, terminated with an RJ45 network jack. The mandatory job walk will assist bidders in determining if any needs for existing conduit or patch panels will be required in the IDFs affected by the installations. If a pre-existing network cable (cat 5e or higher) is already in the location where the two drops are required, please deduct 1 cable from the requirement as long as it is testing good and the distance is equal or below 100 meters.
2. Install 1 Aruba external wireless access point along with associated mounting kit (if needed) at every designated location, see Appendix L for access point locations and heat map information. Provide 1/2" seal tight flexible conduit to access point from junction box to the POE port location in the back of the access point. See figure 21 on Appendix D for an example of the desired finished installation design. All access points must be installed a minimum of 12 feet from the ground and at least 1 foot above and off center any location where a surveillance camera is also being installed so that it does not interfere with the angle nor cast a shadow onto the camera image. See technical requirements for the exact Aruba access point and mounting kit models.
3. Install 1 Advitia security camera (qty 200) and associated housing kit at every designated location, see Appendix M for camera locations, models, and angle direction information. See technical requirements for the exact Advitia camera and associated hosing kit models.
4. Provide additional IDF patch panels and 4" conduit, where utilization of existing pathways and patch panels is not an option.
5. Provide a quantity of 400, 1-Meter network patch cables (250 in black & 150 in green) to the district. The district's Network Administrator will assist selected vendor in patching in to existing IDF switches in order to test connectivity
6. Utilize all existing pathways (conduit, ladder rack, j-hook) within the buildings. Supply any additional j-hooks within the dropped ceilings to prevent cables from touching any electrical lines or lighting fixtures.
7. Remove pre-existing camera surveillance equipment and mounting equipment on any building receiving new cameras and return said equipment to district staff.
8. Provide port labeling that is consistent to district naming convention, see Section 1.06 for sample

*Appendices available for download at <https://www.emuhsd.org/bids>.

1.04 Technical Requirements

1. The model number for all Aruba external wireless access points is Aruba AP-275 and its data sheet is listed in Appendix A.
2. The model number for all Aruba external wireless access point mounts is Aruba AP-270-MNT-V1 and the data sheet is listed in Appendix C. An installation and best practices guide for this device has been provided within Appendix D and a template for the mounting plate is listed in Appendix B
3. The model numbers for the two Advitia surveillance cameras are A-54-OD and E-37-V. The data sheet for the A-54-OD can be found in Appendix E and the data sheet for the E-37-V can be found in Appendix H. The “Quick Start” installation and configuration guides can be found in Appendix F and Appendix I.
4. The model number for the A-54-OD camera wall mount/junction box is A-MWM. The data sheet for this unit can be found in Appendix G.
5. The model number for the E-37-V camera wall mount/junction box is E-B203-WM. The data sheet for this unit can be found in Appendix J.
6. All equipment must be installed a minimum of 12’ high on wall to minimize vandalism.
7. 4 square junction boxes shall be used to house network cable/jack externally, unless existing camera or access point mount/junction box can be utilized for this need.
8. If camera housing/mount is not required given the existing location’s conduit design, notify district personnel and save mount for RMA.
9. External access points must be installed a minimum of 1.5’ higher than the security camera so that it does not interfere with camera image nor does it cast a shadow onto the image.
10. All new network drops shall use indoor/outdoor-rated UV resistant Cat6 cable, equivalent to Mohawk Indoor/Outdoor Cat 6 VersaLAN in design, see Appendix K.
11. All network RJ45 jacks are required to use white Leviton Cat6 Quickport 61110-RW6 connectors.
12. When existing IDF network patch panels do not have capacity to add additional network drops, the Leviton 24 Quick Port Patch Panel must be used to expand capacity. The model number for this unit is 49255-H24 and the product specifications can be found on Appendix N
13. All network jacks involved in the installations must use the following naming conventions and place/replace labels on either end of the network jack: Building number, hyphen, EAP (external access point) or SC (surveillance camera), hyphen, and followed the access point/camera number. E.g. A-EAP-1 (access point) or A-SC-1 (security camera). A numbering map will be provided to the installation teams prior to start.
14. MDF and IDF locations are documented in Appendix O
15. External wireless access point campus locations and heat maps can be in Appendix L
16. All configuration staging and labeling per device will be performed by district staff prior to the installation start date per campus.
17. All network drops & cabling must be warranted for a minimum of three (3) years from the point of installation.
18. All installation craftsmanship must be guaranteed for a minimum of two (2) years from the point of installation.

1.05 Locations and Installation Quantities The following are the locations / quantities of the installations and network drops:

<p>Arroyo High School 4921 Cedar Ave, El Monte, CA 91732</p> <ul style="list-style-type: none"> • 16 External Access Points • 38 Cameras • 76 Network Drops* <p>Community Day School (AHS Campus) 5050 Kings Row, El Monte, CA 91732</p> <ul style="list-style-type: none"> • 1 External Access Points • 4 Cameras • 8 Network Drops* <p>EMUHSD – District Office 3537 Johnson Ave, El Monte, CA 91731</p> <ul style="list-style-type: none"> • 1 External Access Points • 6 Cameras • 12 Network Drops* <p>El Monte School 3048 Tyler Avenue, El Monte, CA 91731</p> <ul style="list-style-type: none"> • 15 External Access Points • 32 Cameras • 64 Network Drops* <p>El Monte-Rosemead Adult School 10807 Ramona Blvd., El Monte, CA 91731</p> <ul style="list-style-type: none"> • 3 External Access Points • 6 Cameras • 12 Network Drops* <p>Fernando Ledesma High School 12347 Ramona Blvd., El Monte, CA 91732</p> <ul style="list-style-type: none"> • 4 External Access Points • 15 Cameras • 30 Network Drops* 	<p>Granada Transition Center 3513 Granada Ave., El Monte, CA, 91731</p> <ul style="list-style-type: none"> • 4 External Access Points • 16 Cameras • 32 Network Drops* <p>Mountain View High School 2900 Parkway Dr., El Monte, CA 91732</p> <ul style="list-style-type: none"> • 11 External Access Points • 24 Cameras • 48 Network Drops* <p>Rosemead High School 9063 Mission Dr., Rosemead, CA 91770</p> <ul style="list-style-type: none"> • 14 External Access Points • 29 Cameras • 58 Network Drops* <p>South El Monte High School 1001 Durfee Ave, South El Monte, CA 91733</p> <ul style="list-style-type: none"> • 12 External Access Points • 27 Cameras • 54 Network Drops* <p>Transportation Offices (SEMHS Campus) 3513 Granada Ave., El Monte, CA, 91731</p> <ul style="list-style-type: none"> • 2 External Access Points • 3 Cameras • 6 Network Drops* <p>Installation Totals</p> <ul style="list-style-type: none"> • 83 External Access Points • 200 Cameras • 400 Network Drops*
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* - This number represents the maximum number of network drops required. The number may be reduced if existing camera surveillance network cabling meets testing requirements.

1.06 Camera Allocation

School Location	A-54-OD	E-37-V	Total
Arroyo	36	2	38
Comm Day School (Arroyo)	1	3	4
District Office	5	1	6
El Monte	31	1	32
EMRAS	2	4	6
Fernando Ledesma	13	2	15
FMOT	3	0	3
Granada Transition Center	12	4	16
Mountain View	23	1	24
Rosemead	27	2	29
South El Monte	21	6	27
Totals	174	26	200

1.07 Additional work shall include but not be limited to the following:

1. Supply power cords, task lighting devices, distribution boxes, adapters, etc., as necessary to complete the work of this Bid package in a timely manner and in accordance with the Contract Documents. Scheduled power interruptions will be performed on off hours or weekends. Contractor shall include in his bid the cost of providing temporary power sufficient for his use, for a period of eight (8) working hours, in the event of an unscheduled power interruption.
2. Provide task lighting as required to facilitate the work of this Bid package in a timely manner and in accordance with the master construction schedule. Provide sufficient task lighting to facilitate work of good quality. Temporary lighting for building access purposes will be provided by this Bid Package in accordance with the latest CALOSHA Safety Orders.
3. Provide dust control, traffic control, flagmen, barricades and safety for work within this Bid package. Dust control must comply with ALL AQMD dust control requirements for the local area.
4. Contractor shall provide for temporary drinking water facilities according to the latest CAL OSHA regulations and as required for this Prime Contractor's work.
5. Proper work attire is expected for all employees and subcontractors under this bid package such as hard hats, orange safety vests, sleeved shirts, long pants and work boots. No drugs, radios, IPODS and pets will be allowed on site.
6. Provide for storage containers for material of work within this contract. Storage of material is to comply with SWPPP standards. Properly store flammable material outside of new buildings. Coordinate location with the Construction Manager prior to mobilizing containers.
7. Provide all submittals and shop drawings for all areas of work of this bid package within 15 days of Notice to Proceed.
8. Provide and maintain on a daily basis, as directed by the Construction Manager, clean work area. All construction debris shall be discarded on a daily basis so as not to interfere with ongoing school activities.
9. **Contractor to coordinate working hours with the Director of Information Systems.**
10. Provide for a minimum of two (2) final cleanup operations of entire project, including but not limited to, wipe down of all interior surfaces and mop all floors. The commencement of final cleaning will be as directed by the Construction Manager and will occur off hours.

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11. Provide temporary water service to the jobsite as required for use during construction.
12. Provide and maintain temporary electrical lighting at building, in accordance with the latest edition of the CAL OSHA safety orders. Provide re-routing of temporary lighting as necessary during the progress of construction at each building and removal upon completion. Furnish and replace all light bulbs / lamps as required throughout the construction period.
13. Provide for removal of existing equipment (projectors, cameras, TV's and brackets) where new equipment will be installed. Removed equipment must be packaged and delivered to the Owner.
14. It is the responsibility of this contractor to protect, in-place, all existing conditions and keep from damage.
15. Where scope of work requires cutting into existing walls and ceilings, contractor is to provide for drywall cut, provide and install required framing, patch and prepare surface for final paint.
16. Provide for restoration of existing conditions where new work touches existing. Exposed ceilings and walls are to be painted to match.

1.08 CONTRACTOR'S USE OF PREMISES

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- A. Contractor shall have use of the premises for the execution of the work as determined by the Director of Information Services.
- B. Contractor shall at all times while on District premises exercise caution and maintain a vehicle speed of no more than five (5) MPH.
- C. Parking shall be at the discretion of the Site Administrator and as available. A loading/unloading area will be designated to facilitate delivery of equipment and tools.
- D. Contractor to assume full responsibility for the offloading including lifting equipment, protection and safekeeping of products under this Contract.
- E. Contractor shall move any stored products, materials, or equipment under Contractor's control that interferes with the operations of the District.
- F. Contractor shall coordinate the use of premises under the direction of the Director of Information Systems.

1.09 ADDITIONAL CONTRACTOR DUTIES

- A. Contractor shall attend meetings as requested by the Director of Information Systems.
- B. Contractor shall provide daily manpower and work activity reports to the Director of Information Systems on a daily basis. Contractor's daily report to include manpower and activities of subcontractors; name and classification of each worker as well as the number of hours worked each day.
- C. Pursuant to District regulations, District facilities are designated a "drug free" and "smoke free" work place. Contractor shall maintain strict policy procedures at all District facilities for all employees, vendors, suppliers, or other providing service or products under the scope of this bid.
- D. Contractor shall maintain a clean and orderly work environment on a daily basis and promptly remove all excess materials at the completion of each activity; promptly remove all trash and debris resulting from the work performed under this bid.
- E. Contractor shall provide and submit Material Safety Data Sheets (MSDS) to the Director of Information Systems for all materials prior to arrival to the project site. Contractor is responsible for separately maintaining an on-site copy of MSDS, instruction regarding MSDS and maintaining all stored materials on site in strict accordance with MSDS and other governing codes and regulations.
- F. Contractor shall designate a foreman or supervisor for this Project that is authorized to coordinate and serve as the point of contact with the District as needed for the duration of the Project.
- G. Contractor shall arrange and coordinate all inspection requests with the Director of Information Systems.
- H. Contractor shall resolve conflicts with other subcontractors prior to commencing installations. Rerouting to resolve conflicts and interferences in the field will be performed at no additional cost to the District.
- I. Contractor shall upon request provide satisfactory proof to the District that a Contract has been issued to any Subcontractor listed in the Contractor's bid within thirty (30) days of acceptance and signature of the Contract executed by the District.

END OF DOCUMENT